

## CLAIM OR CLAIMS

### WHAT IS CLAIMED IS:

5 1. A method of performing a multi-protocol call/procedure trace on GPRS Gb and Gr interfaces of a GPRS/GSM system comprising the steps of:

acquiring PDU/MSU data from the GPRS Gb and Gr interfaces at a measurement location;

10 indexing in real time the acquired PDU/MSU data at a transactional level and at a raw data level;

storing the indexes and the acquired PDU/MSU data in a storage device at the measurement location;

15 on demand processing by a remote server at the measurement site a search request, correlating all related data from the storage device using the indexes;

providing the results from the search request to a central server;

disseminating the results by the central server to remote servers at all measurement sites of the GPRS/GSM system;

20 repeating the processing by the remote server using dynamic triggers from the previous steps to correlate all related data from all measurement sites;

providing the final results to the central server; and

aggregating the final results and providing them to a client for display processing.

2. A system for monitoring a mobile communications network comprising:

a probe coupled to a point in the mobile communications network for acquiring data from the mobile communications network;

a remote server coupled locally to the probe for indexing the acquired data at a transactional and a raw data level;

disk arrays coupled to the remote server for storing data and indexes;

a central server remotely coupled to the probe and remote server for communicating with the remote servers and, for a call procedure trace, collecting and correlating data from the remote servers to produce results requested by the call procedure trace; and

a client server coupled to the central server for communicating the call procedure trace to the central server and displaying the results from the central server.